

The Purpose of Milk in Nature is to Provide all the Nutrients to Sustain Health, Grow, Protect and Heal

The *purpose* in nature of milk is to provide all the nutrients necessary to sustain health, grow, protect and heal. Nature is efficient. So is milk! NOTE, pasteurization of milk kills off many nutrients found in raw milk. See [Raw Milk is more Nutritious than Pasteurized Milk](#)

Raw milk (milk that is NOT pasteurized or homogenized) contains the following nutrients that are all 100% metabolically available:

every known fat and water soluble vitamin

87% water

proteins

carbohydrates in the form of Lactose

minerals, including all Electrolytes and Iron

all 18 fatty acids and healthy cholesterol

ensymes that help break down carbohydrates, fats and proteins

Proteins. Raw milk contains all 22 amino acids, including all 8 of the essential amino acids. As our body does not produce the 8 essential amino acids, we can only get through food. Raw milk also contains proteins called caseins and whey proteins. Raw milk proteins include (i) a iron-binding protein that improve absorption and assimilation of iron, (ii) antibodies that provide resistance to many viruses, bacteria and bacterial toxins, (iii) mineral binding proteins to help absorb electrolytes and (iv) proteins with antiviral properties.

Carbohydrates. Raw milk contains Lactose, the first carbohydrate most baby mammals ever taste, which is made up of two simple sugars, glucose and galactose. Glucose is our body's primary source of energy. Glucose is the *sole* source of energy for brain and red blood cells. Cow's milk hovers at around 5% lactose (human milk averages a bit higher at just over 7% by comparison). It's got a fairly low glycemic index (doesn't boost insulin levels very quickly) and so is better tolerated by diabetics. See [Natural Sources of Glucose - Our Body's Key Source of Energy](#). Also see [Natural Ways to Help Prevent and Treat Type 2 Diabetes](#)

Raw Milk Mineral Content	Content Per Quart
Sodium	330-850mg
Potassium	1040-1600mg
Chloride	850-1040mg

Calcium	1040-1225mg
Magnesium	85-130mg
Phosphorus	850-940mg
Iron	280-570ug
Zinc	1880-5660ug
Copper	95-570ug
Manganese	19-47ug
Iodine	245ug
Fluoride	28-207ug
Selenium	4.7-63ug
Cobalt	0.47-1.23ug
Chromium	7.5-12.3ug
Molybdenum	17-113ug

Raw Milk Vitamin Content	Content Per Quart
Vitamin A - fat soluble	375ug
Vitamin C - fat soluble	19mg
Vitamin D - fat soluble	38IU
Vitamin E - fat soluble	940ug
Vitamin K - fat soluble	47ug

Vitamin B1 - Thiamine	425ug
Vitamin B2 - Inositol	1650ug
Vitamin B3 - Niacin	850ug
Vitamin B6	470ug
Vitamin B2 - Pantothenic Acid	3300ug
Biotin	33ug
Folic Acid	52ug
Vitamin B12	4.25ug

Enzymes are proteins (made out of amino acids) change (catalyze) other substances without taking part in the reaction themselves. In digestion, enzymes help break down carbohydrates, fats and proteins into nutrients the body can readily absorb and use.

Probiotics are beneficial bacteria that help with digestion, health of the intestines and brain activity. **See [Probiotics in Milk Products Improve Brain Function](#)**

Raw Milk Enzyme Content
Amylase
Catalase
Lactase
Lactoperoxidase
Phosphatase

Raw milk nutrient content will vary some depending on soil conditions and type of food. Grass fed cows are considered to produce the most nutritious milk. Raw milk from Guernsey cows, for instance, have exceptionally high content of beta carotene and a high protein content.

Raw milk gives athletes a competitive advantage. **See [Raw Milk - Most Effective Sports Training and Recovery Drink!](#)**

Raw Milk gives Athletes a Competitive Advantage

Raw Milk is by far the most effective and nutritious drink for athletes for training and recovery. Raw (unpasteurized) milk is more nutritious than pasteurized milk as some of the nutrients in raw milk are killed or reduced during the pasteurization process.

All other sports drinks are gimmicks! All the other sports drink contain some of the following: (i) high fructose corn syrup or refined sugar which are merely empty, dehydrating calories, (ii) soy protein which reduces testosterone production in men, (iii) synthetic 'vitamins' which are not fully absorbed by the body, (iv) carbonation, which limit calcium absorption, (v) caffeine, which is dehydrating, and (vi) possibly harmful food coloring. Even chocolate milk, although it tastes great, lacks the nutrient punch of raw milk and can be dehydrating due to added high fructose corn syrup and caffeine.

Raw milk is a complete and balanced food (**See [Raw Milk Nutrient Content](#)**) and has the following advantages for athletes:

Hydration. Raw milk is 87% water. Consistent proper hydration is essential for athletic performance during training, recovery and racing.

Vitamins. Raw milk contains every vitamin known to man.

Carbohydrates. Raw milk contains the carbohydrate Lactose, which is composed of glucose primarily and galactose. Glucose is our body's primary source of energy. **See [Natural Food Sources of Glucose - Our Body's Key Source of Energy](#)**. Raw milk also contains the enzyme Lactase which digests lactose creating Glucose. The pasteurization process destroys the

enzyme lactase. People that do not produce their own lactase can develop lactose intolerance symptoms or may be lactose intolerant

Electrolytes. Raw milk contains all the electrolytes - potassium, sodium, magnesium, calcium and chloride. Electrolytes balance are essential for peak athletic performance and injury prevention. [See Hydration and Electrolytes - Impact on Athletic Performance.](#)

100% Bioavailable. All the nutrients contained in raw milk are 100% bioavailable.

In contrast, most nutrient supplements have limited or low absorption percentages and, as with all supplements, have toxicity considerations and may be harmful over long term use.

Quick Absorption. Raw milk contains enzymes and is designed for quick and easy absorption of nutrients into the body. Many of these enzymes are killed off during pasteurization. For instance, we talked above about how the enzyme Lactase is included in raw milk for the purpose of quickly digesting Lactose into Glucose. Also, for instance, raw milk contains the fats necessary for the quick absorption of the fat soluble vitamins (Vitamins A, D, E and K) and water for the quick absorption of the water soluble vitamins (B-Complex Vitamins and Vitamin C).

Protein. Raw milk contains *all* 22 amino acids, including all 8 essential amino acids all of which are 100% bio available.

Iron Absorption. Raw milk contains Lactoferrin, an iron-binding protein. Lactoferrin improves the absorption and assimilation of iron necessary for red blood cell production.

Pasteurization kills most Lactoferrin. [See Raw Milk v. Pasteurized Milk Nutrient Content](#)

Mineral Rich. Raw milk contains numerous minerals, including iron, zinc, selenium, iodine, phosphorous, and more, in addition to the minerals listed above under Electrolytes.

Red Blood Cell Production. Raw milk contains the key ingredients (Iron, Folate, Vitamin B12) necessary to produce red blood cells. Our body produces on average 3 million red blood cells daily. Every day we need Iron, Folate and Vitamin B12 to produce red blood cells, which carry oxygen to all our cells.

Muscle Oxygen Consumption and Muscle Recovery. Raw milk is high in Omega-3 fatty acids. Significant to athletes, especially endurance swimmers, runners, cyclists and triathletes, Omega-3 fatty acids are associated with (i) increased efficiency of muscle oxygen consumption and (ii) resistance to muscle fatigue. Omega-3 fatty acids promote resting oxygen consumption to accelerate recovery.

Healthy Fats. Raw milk contains healthy energy laden fats and enzymes which help digest fats. These fat digesting enzymes contained in raw milk are destroyed during the pasteurization process. These fats are necessary to metabolize proteins and calcium, and are a primary energy source.

Strong Bones and Muscle. Raw milk is rich in calcium needed for bone and muscle tissue development and repair.